

VISIT...

LANZAROTE
Caliente.COM



Contractor's Guide to Value Engineering (Version 2)

**Office of the
Under Secretary of Defense
For Acquisition, Technology and
Logistics**

April 2003

CONTRACTOR'S GUIDE TO VALUE ENGINEERING

Version 2

A Systems Engineering Guidebook

**Office of Defense Systems
Under Secretary of Defense
(Acquisition, Technology & Logistics)**

April 2003

FOREWARD

The objective of the DoD Value Engineering (VE) Program is to identify improvements in defense systems that can reduce costs and increase performance. DoD hopes to promote contractor participation in the DoD VE Program by:

- 1) providing informational/educational material and assistance to contractors
- 2) providing Service Value Engineering program advocates who can advise and assist DoD prime contractors and their subcontractors in developing Value Engineering Change Proposals (VECPs) for submittal to the Government as well as expedite the processing of the VECP through the DoD system until formally approved through bi-lateral contract modification.

Contractors receive a number of benefits for their participation in VE, including a share of the savings as additional unlimited profit that results from VE changes to its contracts. Also, contractors may benefit from reduced costs, increased efficiencies, reduced overhead, improved competitive postures, etc.

The effectiveness of a contractor's VECP is dependent upon the quality of the VECP proposal; knowledge, understanding, and attention applied to proposal preparation and submission; and up front coordination with the Government approving authority. The purpose of this Guide is to provide information and suggestions that can facilitate the successful development, preparation, submission, and implementation of VECPs. This Guide is not intended to make the contractor an expert on VE principles or techniques but to encourage and assist in understanding the VE process and preparing and submitting VECPs.

As in all other contractual actions, it is extremely important to read the contract before developing VECPs. This review of the contract will acquaint the contractor with specific contract requirements and provisions, and may also reveal non-value-added requirements/provisions that add cost to the performance of the contract. These non-value-added requirements/provisions may themselves be appropriate targets for VECP submittal if they meet other VECP requirements (that is, if they require a change to the contract and could reduce costs of the hardware/software deliverable requirements).

Contractors can obtain additional guidance from the VE clause in their applicable contract, Federal Acquisition Regulation (FAR) paragraph 52.248-1, or their Government contracting office. Personal assistance may be obtained from the Government VE advocate with which they do business. Government points of contact appear at Appendix A. General information can be obtained from web site: <http://ve.ida.org>

Contents

SECTION I – WHAT IS VE?	1
SECTION II - WHAT IS A VEC?	2
SECTION III - TYPES OF VE PROVISIONS IN CONTRACTS.....	3
SECTION IV - BENEFITS OF SUBMITTING VECs.....	3
SECTION V - PREPARING VECs	4
SECTION VI - WHERE TO SEND VECs	8
SECTION VII - SHARING OF VEC SAVINGS	8
SECTION VIII - WHAT TO DO IF THERE ARE NO VE PROVISIONS IN THE CONTRACT	11
SECTION IX - SUBCONTRACTOR VE	11
SECTION X - VE AND PERFORMANCE-BASED CONTRACTS.....	12
SECTION XI - ADDITIONAL VEC GUIDELINES	12
SECTION XII - CONTRACTOR’S GUIDE FOR EFFECTIVE VE	13
APPENDIX A - POINTS OF CONTACT	A-1
APPENDIX B - ABBREVIATIONS.....	B-1

SECTION I – What is VE?

Value Engineering is a systematic and creative way of analyzing an item, system, process, facility, etc., for the purpose of identifying essential function(s) and alternate methods to satisfy those essential functions in the most cost-effective manner. The normal result of application of VE is a decrease in cost while improving quality, reliability, durability, effectiveness and/or other desirable characteristics.

Because "costs" are measurable, "cost reduction" is normally associated with the VE program and, in fact, cost reduction is primarily addressed in this document. It is important to remember that the real objective of a VECP is "value improvement" and that may not result in an immediate cost reduction.

Overall costs include acquisition and operations and support (O&S) costs of an item or system. Value Engineering is performed to eliminate or modify any element that significantly contributes to the overall cost without adding commensurate value to the overall function. Value Engineering solutions must not degrade overall system performance, quality, maintainability, reliability, or interchangeability.

Potential VE Applications

Many items in the DoD inventory are procured in accordance with Government developed specifications and are procured in large quantities on a regular basis. Due to advances in technology, materials, and processes, the applicable specifications may be outdated, and "technological regression" by a contractor may be needed in order to produce to the existing specifications. Items in this category are good VECP candidates.

Another area that offers potential for VE is where an item was designed and developed on a stringent schedule to meet urgent requirements. Under these conditions, the designers often incorporate "old, reliable" components or subsystems into the design simply because time will not permit qualification of an improved substitute. However, a newer, less expensive and more reliable alternative may have been developed and proven since the original system development. When this situation arises, submission of a VECP to incorporate the improved item or subsystem should be considered.

Potential for VE may be found in almost any aspect of a contract or program. A general listing of these aspects (not all-inclusive) follows:

- | | |
|-------------------------|-------------------------------|
| - Contract Requirements | - Hardware |
| Technical | Procurements |
| Support | Fabrications & Assemblies |
| Data Delivery Schedules | Government-Furnished Material |
| - Manufacturing | - Maintenance |
| Procedures/Processes | Repair Policy/Procedures |

- Tooling
- Test Procedures/Equipment
- Installation
- Equipment Requirements
- Layout/Procedures
- Repair Level/Cycle
- Test Equipment
- Operations
- Policy/Procedures
- Staffing

Performance-based contracts do not preclude VE. The performance specification normally addresses the deliverable end item and does not reduce the opportunities for VECPs against the contract requirements/provisions which are not directly linked to the deliverable hardware/product. Even the performance/functional requirements of the performance specifications are potential VE targets as part of trade-off-analysis, and resulting proposed changes may well qualify as VECPs. Depending on the circumstances, VECPs may be a preferred approach for the contractor to “lock in” its share of future savings.

SECTION II - What is a VECP?

A VECP is a proposal submitted to the Government by the contractor in accordance with the VE clause in the contract. It proposes a change that, if accepted and implemented, provides an eventual, overall cost savings to the Government. A VECP may be a change that updates an existing design to the current state-of-the-art technology, simplifies complex material by modifying or eliminating components, updates specifications/drawings providing improved data for future procurements, or reduces Contract Data Requirements List (CDRL) items, to name a few examples. The VE provisions in a contract prescribe that the contractor receives a substantial share in the savings accrued as a result of implementation of the change. In other words, a VECP provides a vehicle through which acquisition and operating costs can be reduced, while the contractor's rate of return is increased. Thus, a VECP can be both a contractor and Government management tool.

In order to qualify as a VECP and to ensure that savings can be shared, the proposed change must be submitted under a current contract and must meet two primary requirements:

- 1) It must require a change to the contract under which it is submitted.
- 2) It must provide an overall cost savings to the Government after being accepted and implemented. (It should be noted that a VECP could result in increased hardware cost but reduced O&S cost. Thus, there would be an overall savings to the DoD.)

A VECP can be submitted at any time under an active contract with a VE clause. VECPs originated during the early stages of a program acquisition cycle often produce the greatest savings because they are applicable to a larger number of units being produced. Also, during the early stages of a program,

implementation costs such as changes to tooling, facilities, drawings, and manuals are not as great. Even though the potential for savings decreases as a program matures, there are still significant VE opportunities. As long as the potential savings exceed the cost of developing and implementing a VECP, the VECP can be profitable. Potential savings are a function of 1) the cost to implement the change, 2) the total quantity to be produced, and 3) the life cycle cost structure of the item.

SECTION III - Types of VE Provisions in Contracts

The basic VE provision is the VE incentive (VEI) clause in the FAR. The VEI clause is included in most supply/service contracts when the contract price exceeds \$100,000. It is also included in most spares/repair kit contracts over \$25,000 if the contract is not for standard commercial parts. The VEI clause may be included in contracts under \$100,000 if the contracting officer sees a potential for significant savings. If the VEI clause is in the contract, contractor participation is voluntary. However, when contractors do participate in the VE program by originating, preparing, and submitting VECPs, they will be rewarded for their (and any of their subcontractors') ideas if the ideas are adopted by the procuring activity. The sharing rate (percentage of the savings) received by the contractor is specified in the FAR.

In addition to the basic VEI clause, the FAR contains alternative provisions that can be incorporated into a contract that require a mandatory VE effort by the contractor. This is known as the VE Program Requirement (VEPR) clause, and may be included in initial production solicitations and contracts for major programs if the contracting officer determines that significant savings may result from a sustained, specified VE effort. Typically, solicitations and contracts employing a VEPR include a Statement of Work, a CDRL requirement for submittal of VECPs, and a separate Contract Line Item. The use of the VEPR has declined in the DoD due to the extensive amount of Government preparation and oversight that is required to manage this VECP category.

SECTION IV - Benefits of Submitting VECPs

There are both direct and indirect advantages to submitting VECPs. Of course, the primary advantage is the fact that the contractor receives a share of the cost savings that accrue from the implementation of VECPs. Although the VECP cost savings in which a contractor shares are considered profit, those profits are specifically excluded from the profit limitations on contracts with the Government. Therefore, VE is a management tool for increasing the contractor's return on investment in contractual performance through proposed changes in contract specifications, purchase descriptions, or statements of work without degradation of quality, reliability, performance, or maintainability of the items being delivered.

Even more important, in many cases, contractors who practice VE principles in their day-to-day engineering, manufacturing, and purchasing operations improve their competitiveness by producing lower cost products. An active VE program also helps to establish a reputation as a cost-conscious producer. This reputation is beneficial to contractors.

The end results of successful VE are:

- An improved profit structure for the contractor
- The needed defense capability with minimum expenditure of tax dollars.

SECTION V - Preparing VECPs

VECP Marketing

As with any change to an active contract, communication between the contractor and the approving authority is critical because a VECP is a change to the contract and thus a change to the program. A program manager's primary concerns are schedule, performance, and cost. Any change that could impact any of these areas requires early discussion and general agreement from all parties involved, including the procuring contracting officer (PCO) and the administrative contracting officer (ACO) for the particular contract.

Prior to the preparation of a formal VECP, it is important for the contractor to pre-sell or market the VE idea. Through clear communication with the procuring activity, pre-selling enables the contractor to get an indication from the Government of whether a potential idea should be pursued. The contractor should get to know the Government Point of Contact (POC)/Government VE advocate who will have the responsibility for evaluating and accepting/approving the VECP. A potential VE idea, whether in the form of a conceptual idea or a preliminary VECP (PVECP), should be presented early to the appropriate points of contact.

The Preliminary VECP (PVECP)

A PVECP is an informal submission of an idea to the Government that has potential to result in the submission of a formal VECP. A contractor is not required to submit a PVECP, but it is likely to improve the contractor's chances of success, especially if the development of the idea presents the possibility of significant risk to the contractor or the program. After communicating the idea to appropriate Government personnel through the pre-selling/marketing process, the contractor can provide a PVECP to explain the idea and highlight the advantages and disadvantages. This PVECP can help the Government determine whether the idea deserves additional consideration or should be

dropped. If the Government likes the idea, the contractor can request proofing requirements, Government impacts, and sustainment costs. The contractor should be aware that the Government's validation that the PVECP has potential to be accepted as a VECP does not guarantee that the VECP will be accepted/approved or guarantee ownership of the idea. Also, the Government's favorable response to a PVECP does not obligate the contractor to submit a VECP, nor does it obligate the Government to pay for effort already expended on the VE initiative.

In other words, a PVECP does not eliminate all risk to the contractor. Instead, it reduces contractor risk by preventing a contractor's expenditure of significant funds and time on ideas that have little or no chance of being accepted/approved. In rare cases of concurrent competitive contract efforts, an independent formal submittal of a VECP from a competitor may pre-empt the favorable consideration of a PVECP. The Government is prohibited from unilaterally "using" a contractor VECP idea or sharing it with a competitor, but there is no prohibition on competitors independently pursuing similar efforts and making independent formal submittals.

The contractor should also be aware that submission of a PVECP does not establish ownership of a VE idea or the right to share in any resultant savings. This ownership is ONLY established when a fully documented formal VECP is submitted.

In summary, submission of PVECPs is advantageous to the contractor in the following ways:

- It establishes a "Date of Record" for contractor development costs incurred in preparation of the VECP
- It reduces the risk of expending time, effort, and funds on an idea that the Government does not wish to pursue.

Basic Requirements of the Formal VECP

When the contractor makes the decision to submit a VECP, the individual(s) responsible for preparing it should realize that the chance of the VECP being approved is proportional to the completeness of its preparation. Sufficient information must be presented so that the Government can conduct a thorough evaluation within a reasonable amount of time. Failure to provide adequate data will usually result in requests for additional data (which significantly delays the process) or could possibly result in a rejection of the VECP. The contractor should prepare a VECP using an approach similar to responding to a formal procurement solicitation. Following is the FAR description of the minimum information required for a VECP submission:

1. Describe the difference between the existing requirement (i.e., the basic contract, a specification, a drawing, or the Statement of Work) and the proposed change. List the comparative advantages and disadvantages of each alternative. Provide justification when a function or characteristic of an item is being altered. Describe the effect the proposed change will have on the performance of the end item. Include pertinent objective test data.
2. Make an analysis and itemization of each contractual requirement that must be changed if the VECP is accepted. Describe and price each contract change. Include any recommendations for changing specifications.
3. Identify the first unit (or item, task, etc.) that will be affected by the VECP.
4. Provide a detailed cost estimate for both the old and proposed methods. Make sure estimated contractor developmental and implementation costs are accounted for as well as any costs attributable to subcontractors. In many cases a rough order of magnitude estimate should be used to expedite VECP submittal. Updated cost data can be provided while the VECP is going through technical review.
5. Provide a description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and/or O&S costs.
6. Predict, as close as possible, the collateral cost savings or increases that the Government will experience upon implementation of the VECP.
7. Identify the point in time that a contract modification implementing the VECP must be issued in order to maximize possible savings. Note any effect the contract modification will have on the delivery schedule or contract performance time.
8. Identify any previous submissions of the VECP giving the dates submitted, agencies involved, contract numbers, and previous actions by the Government, if known.

Format of the Formal VECP

The FAR clause relative to VE does not specify a particular format to be followed in preparing a VECP. Configuration management should be performed in accordance with the terms of the contract. Any questions should be directed to the Government contracting officer.

Transmittal Letter

Preparation of a transmittal letter forwarding the VECP to the PCO and the ACO is also a very important step toward achieving success in contractual VE. The transmittal letter should state that the VECP is being submitted pursuant to the VE provisions of the contract. The transmittal letter should also serve as a summary of the contents of the VECP and should briefly state the nature of the proposed change, estimated price changes, and reference to where complete details can be found in the proposal. The transmittal letter serves as a “Table of Contents” of the proposal and as a marketing document, bringing out the highlights of the proposal in both technical advantage and overall cost reduction to the Government. The contractor should ensure that the PCO, ACO, the appropriate Program Office, and the Government VE Office/POC receive a copy so that the evaluation and final decision can be expedited.

Restricting Data

Normally, the Government has unlimited rights to use the data in a VECP. If a VECP contains information that the contractor wishes to restrict from use prior to Government approval, the contractor should include an appropriate legend on each page of the VECP. The FAR language for supply/service contracts for this legend is

“This data, furnished under the VE clause of Contract No. _____, shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a VECP submitted under the clause. This restriction does not limit the Government’s right to use information contained in these data if it has been obtained or is otherwise available from the contractor or from another source without limitations.”

However, if the VECP is accepted, the Government then has the right to use any and all data contained in the VECP and its supporting documents.

If the VECP contains proprietary data that the contractor wishes to restrict even after acceptance of the VECP, a statement to that effect must be included in the letter of transmittal. The proposal should be marked with the appropriate limited rights legend from the “Rights in Technical Data and Computer Software” clause of the DoD Federal Acquisition Regulation Supplement, and the contractor must explain in the proposal the basis for asserting limited rights. The contract modification implementing the VECP should specify the limited rights that the Government has accepted. The contractor should realize, however, that a VECP that results in a “sole source” condition for future acquisitions might not be as readily accepted as one for which this restriction on sources is not imposed.

SECTION VI - Where to Send VECs

The FAR governs the distribution of VECs. The clauses for supply/service contracts require that VECs be submitted to the Procuring Contracting Officer (PCO) and when the contract is administered by other than the Defense customer (e.g., Defense Contract Management Agency), a copy of the VEC must be sent simultaneously to the ACO. Copies should also be sent to the appropriate Program Office and to the Government VE Office/advocate.

It is extremely important that the Government VE advocate receive a copy of the VEC. The Government VE advocate should be made aware of the VEC so that they can assist in expediting the evaluation and in supporting the accept/reject decision process by the PCO. The Government VE advocate monitors all VECs received and, through close coordination with the PCO and Program Office, facilitates timely processing.

SECTION VII - Sharing of VEC Savings

The DoD has been encouraging submission of VECs since the VE policy was first established in the Federal Acquisition Regulation (FAR). Many changes have occurred over the years that have clarified the FAR language and increased the contractor's share of savings.

Acquisition and collateral savings are two basic types of savings that can be shared when a VEC is approved and implemented under a supply/service contract. FAR Part 48 and 52.248-1 describe the definitions of terms used in VE, the criteria for VEC acceptance and approved sharing rate.

For completeness, the following paragraphs contain the sharing arrangements in the context of firm fixed price contracts with VE Incentives (VEI) provisions.

Acquisition Savings

The FAR defines "Acquisition Savings" as "...savings resulting from the application of a VEC to contracts awarded by the same contracting office or its successor for essentially the same unit." Acquisition savings may include savings obtained on the instant contract, concurrent contracts, and future contracts.

The instant contract is the contract under which the VEC is submitted. If the VEC is accepted and implemented on items delivered under this contract, the contractor will receive a percentage share of the net savings that accrue as a result of the VEC. In calculating these savings, the contractor's costs (and subcontractor's, if applicable) for development and implementation of the VEC and the Government's costs for implementation are all taken into consideration. A contractor's development costs are those costs incurred in developing, testing,

preparing, and submitting the VECP. Development costs materialize after it has been determined that a VECP will be prepared and prior to acceptance of the VECP by the Government. Implementation costs are those costs resulting from contractual changes required as a result of Government acceptance of the VECP. Implementation costs materialize after the VECP has been approved. It is important that, for audit purposes, the contractor identifies and records these costs incurred (including subcontractor costs). In calculating any adjustment in this contract's price for instant contract savings (or negative instant contract savings), the contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs and any value engineering incentive payments to a subcontractor, clearly resulting from a VECP accepted by the Government under this contract. The contractor may choose any arrangement for subcontractor value engineering incentive payments provided that the payments shall not reduce the Government's share of concurrent or future contract savings or collateral savings.

Concurrent contracts are those contracts that the VECP originator (referred to as contractor A) and other contractors (contractors B, C, etc.) have for essentially the same item. If the Government directs that contractor A's VECP be incorporated into contractor B or C's contract, then contractor A will receive a share of the net savings that are obtained from contracts B or C (any contract affected by contractor A's VECP). Contractor A's instant contract total price will then be increased by that amount.

Acquisition savings can be shared in one of four ways. If the Government can predict with some degree of certainty the number of affected items to be procured within the share period (and this number is not classified), the "lump-sum" method of settlement can be used if the contractor and the contracting officer so agree. The contract modification incorporating the VECP will specify the anticipated future procurement quantity. The cost savings per unit are then multiplied by the anticipated share period quantity, and the instant contract price is increased by the contractor's share of that amount.

Two other ways of sharing fall into the category of the "royalty" method. One way of sharing under this method is that the contractor receives a portion of the savings that occur as *contracts incorporating the VECP are awarded*. The other way of sharing under the "royalty" method is that the contractor receives a portion of the savings that occur as *VECP-affected units are delivered*. This sharing applies to items *scheduled* for delivery within the determined share period (as described in the FAR), which begins upon acceptance of the first item affected by the VECP. In the case of multi-year instant contracts, sharing applies only to quantities that 1) are fully funded at the time of VECP acceptance and 2) fall within the determined share period. It is the contractor's responsibility to maintain records from the time the first VECP-affected unit is accepted until the determined VECP share period ends. Whenever the Government issues a new contract during this share period for essentially the same item, and the

contractor's VECP has been incorporated into the contract documents, the contractor is entitled to a portion of any savings occurring during the share period. Payment will be made via the instant contract when savings are realized. Normally, the savings per unit that were calculated for the original contract will be multiplied by the number of units scheduled for delivery prior to expiration of the share period. Also, in design or low rate initial production contracts, the Government may modify the usual VE clause to improve contractor incentives. If the clause is so modified, the sharing formula is expressed in terms of a specific quantity and not in time. This quantity is the number of units affected by the VECP that are scheduled to be delivered over a period of between 36 and 60 consecutive months (set at the discretion of the contracting officer for each VECP as described in the FAR) that spans the highest planned production, based on planning and programming or production documentation existing at the time the VECP is accepted.

The fourth way of sharing savings with the contractor is the "no-cost modification" method. Under this method, the contractor keeps all savings from the instant contract and concurrent contracts. The Government keeps all savings from future contracts and concurrent contracts with *other* sources as well as all collateral savings. This method, if agreed upon by both the Government and the contractor, can minimize the administrative costs of determining and negotiating savings. It should be noted that if the "lump-sum" method or the "no-cost settlement" method cannot be mutually agreed upon, then the "royalty" method will be used.

Collateral Savings

Collateral savings are those measurable net reductions in cost of operation, maintenance, logistics support, shipping, or government furnished equipment, which result from an accepted VECP. In some situations, a VECP might increase the acquisition cost of an item but result in substantial collateral savings. For collateral savings, the contractor is entitled to 20 percent to 100 percent (determined by the contracting officer as described in the FAR) of the savings that the Government estimates will be realized during an average one-year period. However, the contractor's share shall not exceed \$100,000 or the value of the instant contract, whichever is greater. The Government determines the amount of collateral savings. Some contractors have had several VECPs approved and implemented with substantial collateral savings. However, determining and verifying measurable net reductions can be difficult and, in some instances, the Government may exclude the collateral savings program.

As stated previously, the discussions above relate to sharing arrangements for firm fixed price contracts with VEI provisions. The sharing arrangements vary with other types of contracts. In addition, incentive contracts may contain special provisions which ensure that no adjustments be made to targets or ceilings when a VECP is approved. This results in instant contract VECP savings being rewarded under the overall contract cost incentive. Whatever the type of

contract, it is the Government's intent to offer a full range of motivational VE options to contractors while precluding duplication of incentives.

SECTION VIII - What to do if there are no VE Provisions in the Contract

It is possible that a contractor could have an idea for a VECP but has a contract containing no VE provisions. In this case, the contractor should notify the PCO that it has an idea and would like to submit a VECP. The contractor should request that a contract modification be issued as soon as possible to incorporate applicable FAR provisions. Normally, VEI provisions will suffice. However, if the contractor's idea will require significant initial funding and the marketing/pre-sell efforts have indicated that the Government is interested, the contractor may request the VE Program Requirement provision.

SECTION IX - Subcontractor VE

Defense prime contractors are encouraged to extend VE provisions to their subcontractors. The FAR requires prime contractors to extend VE provisions to their subcontractors on contracts of \$100,000 or greater; however, VE may be extended to subcontractors on contracts of lesser value.

The prime contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs and any VE incentive payments to a subcontractor that clearly result from a VECP accepted by the Government under this contract. The contractor may choose any arrangement for subcontractor value engineering incentive payments provided that the payments shall not reduce the Government's share of concurrent or future contract savings or collateral savings.

Prime-to-subcontractor VE arrangements can be made by the prime contractor extending to the subcontractor any or all of the instant contract savings and/or a percentage of whatever amount the prime contractor receives as his/her share of concurrent contract share, collateral share, and future acquisition share. For example, a simple paragraph could be included in a subcontract that might provide a 50 percent share of whatever dollar amount the prime contractor receives in the four areas of sharing on a successful VECP.

The sharing between prime contractor and subcontractor can be a matter of negotiation between them and should provide motivation for the subcontractor to submit VECPs to the prime contractor. It should also provide a fair share to the prime contractor who is responsible for putting a subcontractor's VECP into proper format and for "selling" it to the Government. Any development and implementation costs incurred by the subcontractor, and the share of instant contract savings extended to the subcontractor, are considered to be a part of

the prime contractor's development and implementation costs. A subcontractor must submit its VECP to the prime contractor who, in turn, submits it to the Government.

SECTION X - VE and Performance-Based Contracts

Recent changes to promote acquisition excellence have mandated the increased use of performance-based contracts. It was believed that performance-based contracting eliminated the contractor's incentive to submit VECPs because under a performance-based contract, contractors can make changes *without* Government approval and keep *all* the savings on their instant and concurrent contracts. So why would a contractor submit a VECP and share the savings with the Government? In situations where there are high development and implementation costs, new/risky technologies, changes that require Government test facilities, and changes that impact the acceptance of products, it is mutually beneficial for contractors to submit (and the Government to accept) VECPs. Additionally, even in a performance-based contract, there are still some areas that remain under Government control for which VECPs may be submitted. Finally, in a contract where cost and pricing data may be collected, it often is beneficial for a contractor to submit a VECP to make it clear that the savings being realized result from VE, not general efficiencies.

To incentivize contractors to practice VE on performance-based contracts and to clarify the special circumstances that occur under performance-based contracts, special language has been developed. Contractors may submit VECPs for the contractor-controlled items without using this special language; however, use of the special language in the performance-based contract facilitates the approval and processing of a VECP. As in traditional contracts, VECP submission under the incentive clause remains a contractor option.

For more information on VE in performance-based contracts or to obtain a copy of the special language for use in your contract, contact the Government VE advocate.

SECTION XI - Additional VECP Guidelines

1. When a contractor submits a VECP for approval, the contractor should not initiate action to implement the change until the contractor receives a formal contract modification approval from the Government.
2. When a contractor submits a VECP, the contractor should identify other similar or related contracts to which the VECP may apply (if known). Identify the potential to use other Program customers to participate in the VECP non-recurring cost, e.g., foreign military sales customers.

3. When a contractor undertakes a VECP effort, the contractor must keep records of development costs and require that subcontractors do the same.
4. Contractors should be as accurate as possible in calculating implementation costs and insist that the Government provide accurate and complete data when calculating Government implementation costs.
5. When a VECP is incorporated into the contract(s), the contractor should maintain internal records identifying the first delivered item containing the VECP.

SECTION XII - Contractor's Guide for Effective VE

Following is a suggested listing of questions to help the contractor determine some of the internal management attitudes and disciplines needed to have a viable, effective VE program:

1. Does the company establish VECP goals?
2. Are VECP goals flowed-down throughout the corporate structure?
3. Are contractor management personnel involved in VECP decisions and approve VE operating goals and budgets?
4. Do contractor management personnel consult with key Government personnel on the use of VECPs as a cost reduction tool and gain Government agreement on the need to apply the VE methodology to the system being acquired?
5. Do contractor personnel receive "credit" for contributions to approved VECPs or are they "penalized" for contributing to reduced contract price?
6. Do contract negotiators understand the FAR VE provisions?
7. Are there VE sharing provisions, as company policy, in subcontracts?
8. Does the company's accounting department identify VECP income separately so that:
 - a. Management personnel can recognize the monetary benefit of VE?

- b. Management can be kept informed of expenditures and receipts resulting from the VE effort?
- 9. Are resources assigned specifically for the development of VECs?
Does the company work to minimize the time to:
 - a. Develop a VEC?
 - b. Obtain internal approval prior to submission of a VEC to the Government?
- 10. Does the company conduct formal VE workshops to expand in-house capabilities?

APPENDIX A - Points of Contact

DoD

Jay Mandelbaum
Phone: 703 695-0472
Jay.Mandelbaum@osd.mil

Army

Nannette Ramsey
Phone: 309 782-5632
RamseyN@ria.army.mil

Navy

William McAninch
Phone: 703 602-2390
McAninch.William@hq.navy.mil

Air Force

Lt Col Ben Badami
Phone: 703 588-7811
Bernard.Badami@pentagon.af.mil

Mr. Martin Jacobs
Phone: 703 588-7809
Martin.Jacobs@pentagon.af.mil

DLA

Mary Hart
Phone: 703 767-1637
Mary.Hart@dla.mil

Missile Defense Agency

Gregory Stottlemeyer
Phone: 703 697-6688
Gregory.Stottlemeyer@bmdo.osd.mil

Defense Contract Management Agency

Stan Beitsch
Phone: 703 428-0948
sbeitsch@hq.dcmam.mil

APPENDIX B - Abbreviations

ACO	Administrative Contracting Officer
CCB	Configuration Control Board
CDRL	Contractor Data Requirements List
DoD	Department of Defense
FAR	Federal Acquisition Regulation
O&S	Operations and Support
PCO	Procuring Contracting Officer
POC	Point of Contact
PVECP	Preliminary Value Engineering Change Proposal
VE	Value Engineering
VECP	Value Engineering Change Proposal
VEI	Value Engineering Incentive
VEPR	Value Engineering Program Requirement

Systems Engineering Office

Under Secretary of Defense
(Acquisition, Technology & Logistics)
(703) 695-2300